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ABSTRACT

The purpose of this study was to investigate the psychological and emotional effects of abortion on women who terminated their pregnancies for social, economic, or personal reasons. These effects were determined, in part, by an analysis of the woman's concept of self, the external support given, and the various coping mechanisms utilized in the pre- and post- abortal phases. Age, race, marital status, education, occupation, income and number of children were found to influence women's general attitude towards abortion and their pre- and postabortal behavior. Postabortal emotions reflected feelings of relief and happiness in most women studied. Recommendations were made that the health disciplines improve the orientation of patients regarding abortion procedures and hospital routine, and also extend postabortal services by teaching contraceptive use and importance. (Author/PC)

# THE PSYCHOLOGICAL AND EMOTIONAL EFFECTS OF ABORTION

by

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## INTRODUCTION

The primary purpose of the present study was to investigate abortion in terms of the psychological and emotional effects it had on women who terminated their pregnancies for social, economic, or personal reasons.

Hopefully, the data presented will provide some basis for doctors, social workers, psychologists, psychiatrists and other counseling programs to assist women in adjusting to their unique family circumstances.

In an ever changing and thought-provoking world in which we live, it is sometimes difficult to keep up with events and situations that shape one's life. For many women, regardless of how enlightened they may be to decide upon an abortion, it is a very difficult emotional and psychological struggle. The experience leaves its mark just as every other important event.

Governor Rockefeller's Abortion Law was amended to read as follows:

> "Justifiable Abortional Act" — An abortional act is justifiable when committed by a female with her consent by a duly licensed physician that such is necessary to preserve her life or within twenty-four weeks from commencement of her pregnancy." (McKinsey's Comprehensive Law 120.25)

Since the enactment of the liberalized Abortion Law in July 1970, according to a report in the Family Planning Perspective (Tietze, 1973:36) approximately 402,000 abortions have been performed in New York City between July 1970 and June 1972. The statistics are based on the reports of the New York City Department of Health.

Knowledgeable of the passage of the liberalized Abortion Law, many women have had the opportunity to avail themselves of safe abortions. No longer is there a need to accept an unwanted or unplanned pregnancy. However, before July 1, 1970,a woman was rarely afforded the chance to independently request termination of an unwanted pregnancy under medical supervision. Legalized abortion has helped to ameliorate this condition.

Much has been written on the subject of abortion. The literature abounds in empirical studies devoted to this broad area. But little research has been done on the psychological and emotional effects abortion has on women since the passage of the Abortion Law. For too long an abortion was considered to be a deviant act and considered a problem for women involved.

Examination of the literature in this area further revealed that most investigators were interested in the physiological, medical and psychological effects on patients who had previous psychiatric histories and therapeutic abortions had been recommended.

A woman's concept of self affects her psychological and emotional states both before and after abortion. This study

assumed that if the preceding theory is valid then there was a basis for investigating the validity of a hypothesis whose premises holds that:

1) If a woman's concept of self is positive before and after an abortion, then her psychological and emotional status would also be positive both before and after the abortion;

2) If a woman's concept of self is negative both before and after the abortion, then her psychological and emotional status would also negative both before and after an aborti .

This study further attempted to show that no matter whether the woman's concept of self is negative - negative or positive - positive pre- and post-operatively respectively, her concept of self will directly determine her psychological and emotional status. The investigators used abortion as the independent variable which has an effect on psychological and emotional reactions, the dependent variable, and self concept as the intervening variable.

The major hypothesis formulated was that conflicting social attitudes, education, economic stability and religious affiliation influence the woman's psychological and emotional responses to abortion.

REVIEW OF LITERATURE

A number of studies dealt with the psychological aspects of abortion primarily of women for whom termination of pregnancy was recommended for medical or psychiatric reasons.

The study done by Jerome M. Kummer, M. D. (1963) reveals that post abortion psychiatric illness is more of a problem of married women who have several children, contrary to the popular notion that it mostly involves illegitimate pregnancy.

Dr. A. Hordern (1967) in his article "Psychiatric Aftermath", cited the findings of Kay & Schapira (65:159,1967). They observed that a vast majority (85%) of women did very well when their unwanted pregnancies were terminated, the self-reproaches of a mild and transient nature only occurred in some 10-15% of cases, and that not more than 1-2% of women subsequently developed a psychiatric illness.

Simon, Senturia, and Rothman (1967) attempted to clarify the following questions in their study: (1) presence of pre-abortion psychiatric illness; (2) the amount and type of psychiatric illness after abortion; (3) the factors which influence the appearance of psychiatric illness after the abortion; and (4) the varying patterns of response to therapeutic abortion. Their sample consisted of forty-six women. Two-thirds of the group had a diagnosable psychiatric illness prior to the abortion. The immediate emotional response to the abortion reported by twenty-three women was mild

feelings of depression. The healthier women responded to the abortion with transient and self-limiting mild depression. A small percentage of the entire group experienced conscious feelings of guilt and a few required psychiatric hospitalization.

Clark, Pond, Forstner, and Tredgold (1968) studied 257 women who had been recommended for therapeutic abortion for psychiatric reasons. In one case the mother's fear of deformity (fetus) was considered dangerous to her health. The women were assessed several days after the abortion. Guilt or depression was commonly found but relieved.

Garrett Hardin's study (1968), "Abortion - or Compulsory Pregnancy," attempted to define the problem of compuslory pregnancy which in principle has no valid justification.

Garrett felt that only the abolition of compulsory pregnancy will solve the erroneously conceived "abortion problem" (not clarified by the author).

Through research it has been proven that unwanted children as compared with their controls, as they grow up were often picked up for anti-social or criminal behavior, received more psychiatric care.

Mrs. Burnell, Divorsky & Harrington (1970) conducted a Post-Abortion Group Therapy for two hundred-fifty patients who had obtained therapeutic abortions. The program had three objectives: (1) to help the patients resolve any residual conflicts about her

unwanted pregnancy and the decision to obtain an abortion, (2) to facilitate the referral for psychotherapy if indicated, and (3) to inquire further into the women's post-abortion adjustment.

Most women expressed a sense of relief from emotional tension, symptoms or insomnia, depression, guilt, somatic complaints, and "post-partum blues." Most of them felt a stigma that they attributed to society's attitude.

C. M. Pare and Hermione Raven (1970) conducted a study of 128 women who were recommended for termination of pregnancy. The general impression of the authors was the lack of serious psychological sequelae from the abortion. Mild feelings of guilt or loss were not unusual. The more mature and motherly the woman, the more likely such feelings were, and the more immature, psychopathic, or unmotherly the more the patient was unaffected by a termination of pregnancy. The authors concluded that patients in whom pregnancy was terminated at their recommendation provided the patient desired it had remarkably little psychiatric disturbance: psychiatric sequelae were much commoner in those patients who were reluctant to have the operation.

George S. Walter (1970:484) in his article, "Psychologic and Emotional Consequences of Elective Abortion" states that a woman's reaction to an abortion is determined almost entirely by her previous psychologic set. He catergorized her feelings as follows:

(1) Guilt-reported incidences varied from none at all to as high as 30%, with none severe. He felt the critical factor in mild, immediate guilt is the actual setup of the clinical situation and the attitude of people caring for the patient. (2) Disturbance of Relationship with the opposite sex - it was found that if the woman had been pressured into the abortion by the man she appeased her guilt by blaming him. He briefly cited the Kinsey report that 90% of his abortal unmarried women resumed premarital coitus, suggesting little psychic damage. Walter briefly discusses the effect of "unwanted pregnancies" and postabortal attitudes on children. He concludes that a woman's request for a legal abortion means that the prospective child risks having to overcome greater social and mental handicaps than his peers.

In a theoretical study Dr. Fleck (1970) involving some of the psychiatric aspects of abortion involving women who sought psychiatric help at the Department of Psychiatry, Yale University School of Medicine, set out to provide answers regarding (1) abortion as a stopgap for contraceptive failure; (2) if abortion became an emotionally traumatic experience because of the demicolegal obstacles that cause women to seek illegal abortions. He arrived at several interesting conclusions:

(1) that relatively healthy women upon advice of their physician were able to continue their pregnancies; (2) affluent women terminated their pregnancies within the framework of present laws;

(3) the termination of early pregnancy through medical intervention produced fewer sequelae, if any, than term parturition.

Dr. Fleck's study and all the above mentioned studies supported the conclusions that unwanted pregnancy and unwilling motherhood produces psychiatric aspects of abortion.

A study done by the Population Council (1971) revealed that extensive research had been carried on to study the economic and psychological burdens of unwanted fertility. The advantages and disadvantages of the practice of individuals, families, and societies. The evidence of psychological effects on women having an abortion is inconclusive. Post abortion psychosis is practically unknown. A recent study of two-hundred fifty women in Syracuse, New York, showed very few negative reactions following abortion; the predominant reaction was one of relief and happiness.

Alice Goldman, R.N. (1971) article she described the following reactions of women who had undergone the saline abortive procedure in an abortion clinic. (1) withdrawal, (2) excessive eating and (3) depression. It was noted that the majority of the patients were poorly informed on how various birth control methods worked.

Raphael (1972) in his article on induced abortions states that if a woman has a realistic assessment of the situation and is strongly motivated to abortion, available evidence suggests that the risk to her mental health is far less than when she is pressured by others. He cites a study by Knutson (1966:99) who showed that at

least 60% of the women studied considered the human life commenced at conception or during first trimester. These findings were important in considering the woman's possible response after the abortion. Another interesting point was that the sequelae and psychological disturbance are less in a woman whose pregnancy is terminated in the early weeks. If a hysterectomy is necessary then a different degree of stress occurs. As the pregnancy advances the baby becomes a more meaningful personality and its loss becomes more the loss of a personality. Depression may appear briefly afterwards.

Dr. Ewing and B. Rouse (1973) did a comparative study of the overall reactions to therapeutic abortion in women. They used one group with previous psychiatric history and another group who had no previous history of mental illness. The results of their study were that twelve per cent of the psychiatric group reported having had psychiatric treatment post-abortively as opposed to three per cent of the nonpsychiatric group. The most common feeling experienced by both groups post-abortively was relief. In conclusion, there were no significant differences in the responses given by the two groups. The authors felt that guilt feelings reported by a few were probably the result of society's stigmatized attitude towards abortion. Their study confirmed that if an abortion is performed on the request of the woman and under good legal and medical conditions, the occurrence of emotional symptoms are minimal and diminishes with the passage of time.

F. Kane, M. D., et al. (1973) did a comparative study of adolescents to measure the motivational factors in abortion patients. They used an abortion group and a control group. They evaluated factors such as psychological loss, reaction to menstrual pain, knowledge and use of contraceptives. The psychological test data seemed to indicate that young women seeking abortions are no more neurotic as a group than nonpregnant girls their age. The authors concluded that routine psychiatric consultation could be dispensed with in most cases.

Helen Dadar (1973) in her article, "Abortion For the Asking" briefly discussed a pilot post-abortal study of black and Puerto Rican girls. They experienced feelings of depression, loneliness and guilt after the procedure.

Most of the studies reviewed revealed that there tends to be little or no negative psychological or emotional effects of abortion on women, particularly those who initiate their involvement into the procedure.

In light of the findings in the conceptual and research literature in the area of effects abortion have on women, there were sound reasons to sustain belief in this study's hypothesis. In an effort aimed at increasing awareness and understanding of the emotional and psychological effects abortion have on women focused on women's self-concept.

METHODS AND PROCEDURES

The original sample for the present study had consisted of 149 women who had requested termination of their pregnancies; however, ten were rejected because they did not meet the criteria according to the guidelines of New York City's Department of Health. A subjective sample was used because all patients who came to the Out-patient and In-patient facilities were used. The women were chosen with the commonality of having "an abortion."

Out of the total sample of 139 women, there were 37 Whites (25.9%), 91 Blacks (65.5), 4 Puerto Ricans (3.6%), 1 Oriental (.7%), and 6 Latin Americans (4.3%). Two women had previous psychiatric histories, 2 were moderately retarded, and one was an epileptic. There were 78 Protestants, 51 Catholics, 5 Jewish, and 5 Others.

Questionnaires, semi-structured interviewing and observation were the methods used in collecting the data. The women were given the first part of the questionnaire which was prepared to obtain demographic information about the respondent. The second and third part of the questionnaire were completed by the means of two interviews which were conducted by the researchers pre- and post-operatively.

The questionnaire consisted of a total of 36 questions. The first part of the questionnaire consisted of 17 questions designed to obtain general information. Question 1 asked about age,

ethnic origin was asked in Question 2; religious affiliation was asked in Question 3; marital status was asked in Question 4; level of education was asked in Question 5; type of occupation was asked in Question 6; approximations of family income was asked in Question 7. Question 8 asked about the number of children; Question 9 asked if previous pregnancies had been planned; frequency in using birth control was asked in Question 10; and Question 11 asked what method of birth control was used. Question 12 asked if any problems had been experienced with previous pregnancies and alternatives such as physical, psychological, social, economic and none were listed. Question 13 asked about previous abortions; Question 14 asked what were the reasons for the abortion and the same alternatives listed in Question 12 were offered. Question 15 asked if the respondent had friends who had had abortions and Question 16 asked her to describe the relationship, the alternatives were very close, acquaintance and not close. Question 17 asked if birth control would be used later on.

The second part of the questionnaire was the Pre-Abortion Interview which consisted of 13 questions. Question 1 asked about the feelings experienced when the respondent became aware of her pregnancy. Several alternatives such as disgust, panic, shock, anger, etc. were listed. Question 2 asked about factors that influenced the decision to have the abortion, such as personal decision, wish

of the sex partner, wish of the family, economic and social. Questions 3 and 4 asked if the male involved knew of the decision and what was his reaction. Question 5 identified the general attitude towards abortion; Questions 6 and 7 asked about how the pregnancy and the decision to have the abortion affected the relationship with the male involved. Questions 8 and 9 identified the respondent's perception of the professional and non-professional staff attitude. Question 10 identified feelings experienced since the decision to have the abortion. Alternatives listed were relief, neutral, sad, varying degrees of depression, happy, guilt and ambivalent. Question 11 asked about the respondent's attitude toward having sex with her partner. Questions 12 and 13 asked about the type of abortion that the respondent was having and if she understood the procedure.

The third part of the questionnaire was the Post-Abortion Interview which consisted of 6 questions. Question 1 identified feelings experienced at the present time, the same alternatives listed in Question 10 of the Pre-Abortion Interview were used. Question 2 asked why the respondent felt depressed or guilty. The alternatives listed were, I'm killing my child, I don't believe in abortions, It's against my religion, My family's accusing me of murder, and The male involved doesn't want the baby. Questions 3 and 4 identified the respondent's perception of the professional and non-professional staff's attitudes. Question 5 asked if an abortion would be recommended to a relative or friend, and Question 6 asked if the respondent would have another abortion.

The In-Patient facility used was the Abortion Unit of a Hospital and Health Corporation owned hospital located in the northern part of the borough of Queens. The Abortion Unit is staffed by three gynecologists, two are White and one is Black. There are three Black registered nurses, one Puerto Rican obstetrical technician, a Black Family Planning Counselor, and three Black nurse's aides. The 99 patients were either in their first or second trimester of pregnancy making them eligible for the suction and curettage or the saline procedure under general or local anesthesia. Five of these patients developed complications after the procedure and were transferred to the general obstetrical unit. Before admission to the abortion unit every patient is seen in the obstetrical-gynecology clinic for a 2-3 week period. Psychiatric counseling and social services assistance is given according to the needs of the patient. Patients were interviewed seven days a week from 6 a.m. to 4 p.m.

The Out-Patient facility used was a Medical Group Clinic located on the upper east side of Manhattan. The Clinic is co-owned by three gynecologists, two are White and one is Black. The counselors are registered nurses, one is Black and the others White. The 40 patients studied at the Clinic were in their first trimester of pregnancy making them eligible for the suction and curettage procedure under local anesthesia.

At both facilities patients were given a thorough phsycial examination and blood workup before the abortion and arrangements made for follow-up care. After being admitted to the facilities the patients were re-examined by the physician to estimate their gestation status to determine whether or not the scheduled procedure could be performed. Patients who received the suction and currettage procedure were interviewed 1-2 hrs. postabortal and saline procedure patients were interviewed one day postabortal.

Individual and/or group counseling was conducted by the nurses pre- and post- operatively to orient the patients to the procedure and what physical manifestations to expect in the following two weeks. The staff set a relaxed and comfortable atmosphere for the patients.

ANALYSIS AND DISCUSSION

This part deals with the respondent's general attitudes towards abortion. Please refer to TABLE I for clarification.

There is a significant relationship ($P<.0001$) between age and how frequently birth control is used as indicated by the 19 yrs. or less age group. Absolutely no form of birth control was used as reported by 75.7% of this age group. Interviews revealed that the adolescents usually lacked accurate knowledge regarding the physiological functions of their bodies and there was a considerable amount of chance taking. In a study of an adolescent group by

Kanter and Zelnik, (1973:21) they stated that:

> "a partial explanation of the low level of current use is the fact that a substantial number of those who have failed to use contraception believe that they cannot become pregnant, either because they are too young, because they had sex infrequently or because they had intercourse at the wrong time of the month."

This high percentage of failing to use contraceptive methods may indicate cognitive dissonance in relation to society's negative attitude towards premarital sexual relations and the stereotype assumption that use of birth control is indicative of promiscuity.

The next highest frequency is the relationship ($P < .005$) between those using the pill and other forms of contraception. The younger the age the less they used effective birth control methods as indicated by the 19 years old or less. Use of the pill was reported by 15.8% of this group, whereas 39.4% of the 25-29 age group used it. The interviews revealed that respondents inconsistently used the pill which is unknown to them increased their fertility and interrupted the preventive conception action of the pill. Reasons for the haphazard pattern varied, some admitted that they forgot to take the pill according to schedule or they failed to refill the prescription, or they were ambivalent about introducing a chemical into their bodies because of the publicized report of adverse physiological effects. The respondents' haphazard use of the other forms of contraceptives (diaphragm, foam and condom) was

seemingly due to their inability to assert control on their own heightened sexual impulses or those of the sex partner to utilize a contraceptive method. In a study on sexual excitations the author states that, "Sexual excitations seems to involve changes in judgment and perspective. Getting out of bed to locate a contraceptive device may seem like an inconsequential irritation and the costs of an unwanted conception may seem very heavy.... But in the heat of sexual arousal, a moment's interruption may seem much more drastic than the threat of an unwanted pregnancy," (Pohlman, 1969,344).

A very high significant relationship ($P<.005$) existed between problems with previous pregnancies and age. The 35 years or over age group had the highest percentage (66.7%) of having had problems. The most common problem reported was severe symptoms of nausea, vomiting and bleeding either during the first three months or the entire pregnancy. Several of the respondents were hospitalized disrupting their roles as wife, mother and/or co-breadwinner of the family.

A significant relationship ($P<.01$) was found between the 25-29 years age group and the number of abortions per individual. A previous abortion before the present one was admitted by 43.8% and 9.4% reported having had more than two abortions. However, the 35 years or over age group had the highest percentage (66.7%) for having had one abortion prior to the present. The interviewers

observed that these respondents experienced anxiety and readily expressed their fears concerning the physical effects of the abortion such as, "Each time I'm afraid because of the possibility of death or sterilization." The majority of respondents were actually unknowledgeable of the number of abortions that were considered reasonably safe according to medical standards. When informed that more than three abortions were hazardous to their health, several told of friends or individuals who had had five or six abortions without experiencing serious impairment to their health.

This part deals with the Pre-Abortion Interview. See TABLE II for clarification.

No significant relationship was found to exist between reasons for the abortion and the age of the respondent. However, a relationship ($P<.05$) was indicated in how the respondent decided to have the abortion and age. The highest frequency was found amongst the 35 or over age group in which 66.7% said "personal." Most of the women related that even though they had consulted with the involved male, a relative or friend, ultimately the final decision was hers. Independent attitudes towards their situation was expressed by comments such as, "I'm the one who will have to bear the burden in the end" and, "I'm the one who would have to carry it for nine months."

A relationship ($P < .05$) was found between age and how the involved male responded to the decision to have the abortion. A high percentage (80%) of males involved with the 35 or over age group approved of the decision followed by the 20-24 years age group with 75% of the males approving. Further clarification on this question by the interviewer revealed that the woman influenced the male's attitude by her overt or subtle unwillingness to accept her pregnancy which she considered her independent right. When the involved male left the decision to have an abortion or not to the respondent, she interpreted this as his approval.

This part deals with the Post-Abortion Interview. Please refer to TABLE III for clarification.

It was found that a relationship ($P < .05$) existed between age and feelings experienced after the abortion. The feeling of relief was reported by the majority of the sample. 67.4% of the 20-24 years age category reported feelings of relief followed by 60% of the 30-34 years age group. The pregnancy was possibly viewed as the cause leading to emotional discomfort. Termination of the pregnancy might be perceived as a resolution to their problem whether they were social, economic, educational, etc.

A weak relationship ($P < .10$) was found between age and having another abortion. The older the age group the more negative their

attitudes were as indicated by 83.3% of the 35 years or over age group. They professed that they would initiate a major change in their contraceptive habits. Several reverted back to the pill while others had an intrauterine device inserted postabortal. The consensus of opinion was that a more responsible attitude towards using contraceptives was the key to preventing an unwanted pregnancy. One could speculate the negative response was indicative of the remaining effects of the respondent's initial apprehension about the abortion procedure, her reaction to the physical discomfort experienced and possibly the staff's emphasis on the dangers of multiple abortions.

Between the variables race and reasons for previous abortions a weak relationship ($P < .10$) was found to exist. Social reasons were given by 66.7% of the white subjects of the sample as compared to 33.3% of the non-white subjects. A contrast was found for economic reasons, 53.5% of non-whites chose this category while only a small percentage (11%) of whites did. These findings may reflect the current value ssystem of non-whites to improve their economic status with the ultimate goal of elevating their social status to achieve equality with their white counterpart.

A relationship ($P < .01$) existed between race and the type of relationship the respondent had with the friend who had experienced an abortion. The highest frequency was found in the "very close" category as indicated by 79.2% of whites and 50% of non-whites.

This might reflect the more independent attitude of the non-white group which restricted the need to consult with another female. (See TABLE I).

A large percentage (88.9%) of the white respondents had informed the involved male of the decision to have an abortion and so had 73.3% of the non-white respondents. These findings indicated a relationship at the $P < .10$ level.

A weak relationship ($P < .10$) was found to exist between race and how the knowledge of the pregnancy affected the relationship. A weakened relationship with the involved male was the common result as reported by 90.2% of non-whites and 77.1% of whites. Both groups considered a realtionship weakened if there was tension, ambivalent feelings experienced by both or one partner or a breakup of the relationship. Respondents reported angry reactions by the male and accusations directed towards the woman's irresponsibility in using contraception (few males reportedly would agree to using condoms). In what appeared to be a form of rationalization, the subjects retaliated against the male's accusatory attitude by accusing him of disregarding their sexual feelings. They felt this was done when the male became sexually excited and did not allow them sufficient time to use a contraceptive or they failed to use one because of their own sexual excitement. Several felt that had the male regarded their lack of desire to engage in sexual relations, the pregnancy would not have occurred. She agreed only to please the sex partner.

A highly significant relationship ($P<.0001$) was found to exist between race and how the decision to have the abortion affected the relationship. A weakened relationship was reported by 34.3% of whites while only 4.1% of the non-whites experienced this effect.

The prevalent attitude that respondents perceived amongst the professional staff preabortal was understanding as indicated by 63.7% of whites and 52.8% of non-whites ($P<.05$). The criteria used by both groups to identify an understanding attitude varied from the administration of pain-reducing drugs, to listening to their problems, to not probing into why they were having an abortion and finally to explaining hospital procedures.

A weak relationship ($P<.10$) was found to exist between race and feelings experienced since the decision to have an abortion. Mild depression was experienced by 20.4% of non-whites, and 16.7% of this group reported feelings of guilt. Relief was experienced by 17.5% of whites while 16.7% of them felt sadness.

A relationship ($P<.01$) was found between race and attitude towards sex. The highest frequency was found in the category of "healthy attitude" as indicated by 66.7% of whites and 58.8% of non-whites. This indicates that the unwanted pregnancy did not have a negative effect on the woman who basically had a healthy attitude towards sexual relations. Respondents clarified their healthy attitude with comments such as, "I enjoy sex," "It's a natural feeling," etc.

A significant relationship ($P<.005$) existed between race and the type of abortion performed. The suction procedure had the highest percentage (80.6%) for both groups indicated by 97.2% of whites and 74.8% of non-whites who had this type of abortion. A very interesting difference was reflected in the administration of the saline procedure, 25.2% of non-whites had this procedure performed compared to 2.8% of whites. These findings may indicate that the non-white group were more ambivalent towards their decision to terminate the unwanted pregnancy and perhaps greater use of denial and fantasy to cope with their situation.

A highly significant relationship ($P<.0001$) was found to exist between race and having an understanding of the abortion procedure. The procedure was understood by 69.4% of the white group and 33% of the non-whites. The possible reason for this difference may be due to the fact that the white subjects in this sample had private physicians who will give medical information to his client whereas the non-whites use public clinic facilities where such a relationship is lacking in many cases due to the fact that the patient may not have the same physician on subsequent visits (see TABLE II).

The postabortal feelings of the subjects and their race indicated a significant relationship ($P<.02$). A feeling of relief postabortal was reported by 60.8% of non-whites and 33.3% of whites. A feeling of sadness was experienced by 30.6% of the white group and only 11.8% of the non-white group.

Attitudes towards having another abortion and race had a relationship at the $P < .01$ level. A positive attitude towards terminating another unwanted pregnancy was expressed by 44.4% of whites compared to 19.6% of non-whites. A negative attitude was expressed by 67.6% of non-whites and 38.9% of whites for having another abortion.

Perception of the professional staff's attitude postabortal was highly significant in relation to education ($P < .0001$). This was supported by 90.9% of the subjects who had a high school education or less and 65% with a college education or more who perceived the staff as understanding.

The same type of relationship ($P < .0001$) was found to exist in relation to the non-professional staff. An understanding attitude was perceived postabortal by 92.9% of those with a high school education or less and 71.8% with a college education or more.(see TABLE III).

A significant relationship existed between education and the type of abortion. The suction procedure was given to 92.5% with a college education or more and 75.8% with a high school education or less. Those with a high school education or less (24.2%) had a saline compared to 7.5% of the college group. In a few cases, the physician had miscalculated the period of gestation based on a prior gynecological examination resulting in the respondents being rejected for the suction procedure. Obviously the better educated

a person, the more exposed he is to available literature on the subject that clarifies any misconceptions, plus as previously mentioned her association with a private physician.

Based on the above, it would be expected that a relationship would exist between education and having an understanding of the procedure. Such a relationship was found at $P<.10$. The respondents with college education or more (52.5%) understood the procedure compared to 38.4% of the high school or less group.

The interviewers observed that several respondents were initially unreceptive to the explanations given concerning the abortion procedure. However, after the gynecological examination and being informed that the abortion procedure would be performed, they requested the interviewer to repeat the explanation (see TABLE II).

A significant relationship ($P<.005$) was found between marital status and the planning of previous pregnancies. Lack of using contraception or the ineffectiveness of contraceptive methods used were reflected in the findings. 93% of the single respondents and 78.9% of the married respondents reported no planning of previous pregnancies.

A relationship between marital status and the contraceptive method was found to exist ($P<.05$). The pill was used by 41.2% of the separated respondents, 33.3% of the married, and 27.7% of the respondents who were single. No form of birth control was reported

by 47% of the single respondents, 35.3% of those separated and 15.4% of those married. These findings may indicate that single and separated respondents may unconsciously want to become pregnant to enhance their femininity. Ambivalence may be in operation since most of the respondents stated they did not want to use their pregnancy to induce the male into marriage.

A significant relationship ($P<.05$) existed between marital status and problems with previous pregnancies. Problems were reported by 34.3% of the separated respondents, 27.8% of the married respondents, and 8.3% of the single respondents (see TABLE I).

A significant relationship ($P<.01$) was found between marital status and the respondent's feelings when she became aware of being pregnant. A feeling of disgust was reported by 35.3% of the separated group, 20.5% of the married and 14.6% of the single group. Frustration was reported by 25.6% of the married, single (6.1%), and separated (5.9%). Many of the respondents had a self-condemning attitude in that they had created an intolerable situation by succumbing to their sexual impulses. In the separated group if the involved male was not the husband this compounded the problem of the woman concerned. Involvement in another unstable heterosexual relationship further threatened her femininity and the unwanted pregnancy could prevent a possible reconciliation with the husband.

A significant relationship ($P < .05$) was found to exist between marital status and how the respondent decided to have the abortion. The highest percentage (44.6%) was found in the category of personal decision as indicated by the separated (52.9%), single (45.8%), and married (38.5%) respondents.

A highly significant relationship ($P < .0001$) existed between marital status and if the male involved knew of the decision. The awareness of the male about the decision to have the abortion was reported by 89.7% of the married respondents, 79% of the single, and 41.2% of the separated respondents. Feelings of disappointment in the male not being more demonstrative in his support was expressed. Those who had not informed the male stated that they did not want to carry the pregnancy full term but feared the male would pressure them into doing so or vice versa if the respondent wanted the child but the male had directly or indirectly expressed his wish not to have a child or an additional one.

A significant relationship ($P < .05$) was found between marital status and the involved male's approval of the abortion. His approval was reported by 77.1% of the married group, 56.1% of the single, and 28.6% of the separated. The high percentage amongst the married group could indicate a certain degree of stability in the marriage and the partners sharing the common idea that an additional child either at the present time or in the future is not desired.

A significant relationship ($P < .05$) was found between marital status and how the decision to have the abortion affected the relationship. The second alternative offered was "other" which included responses such as strained, ambivalence and constant. A high percentage (97.1%) of the married group chose other followed by the single (82.4%) and the separated (66.7%). Several of the involved males expressed resentment towards the women destroying something which he viewed as "part of himself." The abortion represented a threat to his masculinity in regards to his ability to procreate. Some respondents reported that the involved male gave his verbal approval of the abortion, but his actions reflected a rejection of the idea.

A significant relationship ($P < .05$) was found between marital status and attitude towards sex as indicated by the healthy attitude reported by 69.2% of the married women followed by 61% of those who were single, and 41.2% of those separated. A neutral attitude was reported by 58.8% of the separated group. Most of the separated respondents expressed receiving little enjoyment from sex, and comments such as, "I'm not a highly-sexed person," "I can do with or without it," etc., were frequently given (see TABLE II).

A relationship ($P < .01$) was found between occupation and the frequency of the use of birth control methods. The more skilled the individual the more frequently she used birth control as shown by the skilled or professional group (31.4%), unemployed (20.5%),

and unskilled (20%) who always used contraceptives. Non-use of contraceptives was reported by 45.8% of the unemployed, 25% of the unskilled and 8.6% of the skilled or professional. Unstable financial circumstances did not seem to influence the women's responsibility towards preventing an unwanted pregnancy.

A significant relationship ($P < .05$) existed between occupation and type of birth control used. The most effective form of birth control, the pill was used by the skilled or professional respondents (48.6%) followed by the unskilled (35%) and the unemployed (22.6%). The unskilled respondents (25%) used the least effective birth control methods such as the condom.(see TABLE I).

A significant relationship ($P < .02$) was found between occupation and how the decision to have the abortion affected the relationship. The second alternative, "other" was reported by 92.3% of the unemployed, 91.7% of the unskilled, and 71% of the skilled or professional.

A weak relationship ($P < .10$) existed between occupation and having an understanding of the procedure. Sixty per cent of the skilled group said they had a clear understanding compared to 38.1% of the unemployed and 30% of the unskilled (see TABLE II).

A significant relationship ($P < .02$) was found between occupation and perception of the professional staff's attitude postabortal. An understanding manner was reported by the unskilled (90%) , unemployed (88.1%), and skilled or professional (68.6%). A significant relationship ($P < .05$) was also found between occupation and perception

of the non-professional staff's attitude. The attitude and occupation followed the same order discussed above. The percentages were 94.7%, 90.5%, and 73.5% respectively (see TABLE III).

A relationship ($P < .01$) existed between income and the number of previous abortions. The higher the income, the greater the frequency of the respondents, 8.3% of the $15,000 or over group, and 6.5% of the $6-8,999.99 reported having had two or more abortions. (See TABLE I).

A weak relationship was found ($P < .10$) to exist between income and how the decision to have the abortion affected the relationship with the male. The highest frequency was found in the "other" category with the lowest income group. 92.9% of the $2,999 income group followed by 91% of the $15,000 or more income group, 88% of the $3-5,999 and 82.1% of the $6-8,999.99 income group.

A significant relationship ($P < .05$) existed between income and understanding the abortion procedure. The middle and higher income groups demonstrated an understanding as indicated by 66.7% of the $9-15,000 income group. The lowest income group, $2,999 (73.7%) had the least understanding (see TABLE II).

A relationship between income and recommending an abortion to a friend was found at the $P < .01$ level. The majority favored recommending as shown by the different income groups. 84.2% of the $2,999 income group, 67.6% of the $3-5,999 income group, 83.3% of the $9-11,999 income group, and 83.9% of the $5-8,999

income group. A negative attitude towards recommending an abortion was expressed by 23.5% of the $3-5,999 income group followed by 16.1% of the $5-8,999 income group (see TABLE III).

A highly significant relationship ($P < .0001$) was found to exist between the number of children the respondents had and how frequently they used contraceptives. Respondents with two or more children showed a great tendency to use birth control methods more frequently as indicated by 35.7% reporting they "always" used contraceptives , and "occasional use" was reported by 40.5% of the group. Non-use of birth control methods was reported by 50.8% of those respondents who had no children.

To some degree the number of children influenced the pattern of contraceptive use. The majority of respondents expressed feelings of being overwhelmed by the prospect of an additional child to the family. Most of them were already experiencing difficulty in fulfilling their role of motherhood. Perhaps for many there was the unconscious desire to conceive, others possibly identified the unborn child with themselves in relation to their deprived childhood.

A very highly significant relationship ($P < .0001$) was found between the number of children and the type of birth control used. Respondents with no children had the highest percentage (53%) for not using any form of contraception. Those with one child had the highest percentage (36.7%) for using the pill followed by the group

with two or more children (33.3%). The type of contraception used depends on the respondents' knowledge of the various types which they receive from different sources,such as the physician, relatives and friends. Many respondents reported that they had experienced ill effects while using the pill and had changed to another form of birth control such as foam. Many expressed skepticism towards insertion of an intrauterine device as shown by the following comments, "I might develop cancer," and, "I dislike the idea of having something foreign in my body."

A relationship ($P<.05$) was found between the number of children and problems with previous pregnancies. Respondents with two or more children (28.6%) experienced problems followed by those with one child (20%).

A significant relationship ($P<.005$) was found between the number of children and the type of relationship the respondents had with a friend who had experienced an abortion. Those with no children (70%) reported a close relationship followed by (56%) of those who had one child. The category of not having a close relationship was chosen by 70.8% of the respondents who had two or more children, 44% who had one child, and 30% of those who had no children (see TABLE I).

A very highly significant relationship ($P<.0001$) existed between the number of children and feelings experienced when the respondent became aware of being pregnant. A feeling of disgust

was reported by 35.7% of the women who had two or more children, 20% of those who had one child and only 7.7% of those who had no children. A feeling of fright was experienced by 20% of respondents who did not have children compared to 4.8% who had two children or more, and 3.3% with one child.

A significant relationship ($P < .02$) existed between the number of children and how the decision was made for the abortion. A personal decision was reported by 47% of the respondents without children, 43.3% who had one child, and 42.9% of those with two children or more. An economic decision was stated by 12.1% of respondents who had no children, 10% of those with one child and 4.8% with two children or more.

Religious affiliation apparently influenced attitudes towards sex. A relationship ($P < .05$) was found to exist between the two as indicated by 70% of the Catholic respondents who had a healthy attitude compared to 53.8% of the Protestant respondents. A neutral attitude was reported by 38.5% of the Protestants, and 18.3% of the Catholics (see TABLE II). To the surprise of the researchers, no relationship was found between Catholics and feelings of guilt. As known to everyone, the Catholic Church forbids abortion and considers it a moral sin. But the Catholic respondents having the abortion were not affected by the stand of the church on the topic and did not consider it a sin as long as

it was for the good of the family (see TABLE III). Furthermore, 50.8% of the Catholic respondents were found to be well informed of the abortion procedure compared to 35.9% of the Protestant respondents. A relationship ($P < .02$) was found between the variables, religious affiliation and understand the abortion procedure (see TABLE II).

A personal decision was stated by 45.9% of the Catholic respondents compared to 45.6% of the Protestants. 83.3% of the Catholics informed the involved male about the decision to have the abortion compared to 72.7% of the Protestants. The males (64%) involved with the Catholic respondents approved of the abortion compared to 58% of the Protestants.

Pro attitudes towards abortion was admitted by 36.1% of the Catholics and 34.6% of the Protestants. Negative attitudes towards abortion was reported by 24.6% of the Catholics, and 34.6% of the Protestants. A neutral attitude was reported by 34.1% of the Catholic respondents and 29.5% of the Protestant respondents.

A strengthened relationship with the involved male developed after the pregnancy as reported by 11.3% of the Catholics and 15.6% of the Protestants.

The pre-abortal perception of professional and non-professional attitudes as being understanding was rated lower by Catholics than Protestants.

Feelings experienced pre-abortal were described as follows: Relief was reported by 18% of the Catholics compared to 10.3% of the Protestants. Sadness was reported by 13.1% of the Catholics and 11.5% of the Protestants. Depression was admitted by 13.1% of the Catholics compared to 24.4% of the Protestants. Guilt was experienced by 9.8% of the Catholics, and 7.7% of the Protestants. Ambivalence was reported by 9.8% of the Catholics, and 17.9% of the Protestants.

Post-abortal feelings of relief was experienced by 49.2% of the Catholics, and 57.1% of the Protestants. Feelings of sadness were experienced by 19.7% of the Catholics, and 14.3% of the Protestants. Happiness was experienced by 13.1% of the Catholics, and 6.5% of the Protestants.

Positive attitudes towards having another abortion for an unwanted pregnancy was admitted by 33.3% of the Catholics, and 20.5% of the Protestants.

A relationship ($P < .01$) was found between religious affiliation and recommending an abortion to a relative or friend as indicated by 85.2% of the Catholics and 70.5% of the Protestants who stated they would recommend an abortion (see TABLE III).

In regards to contraceptive methods used, 37.7% of the Catholics used the pill compared to 25.6% of the Protestants. Non-use of any form of contraception was reported by 36.1% of the Catholics, and 37.2% of the Protestants.

These findings indicate that Catholicism did not affect the attitudes of Catholic respondents towards abortion. The above-mentioned findings show that the differences between Catholics and Protestants were not significant and in most of the cases, the Catholics showed a more liberal attitude than the Protestants.

The authors feel that indication of a respondent's positive concept of self was reflected by their giving "personal reasons" for deciding on the abortion. Personal reasons for the married or separated respondents included their feelings of being overwhelmed by having an additional child in the family or they were satisfied with the present number of children. The single respondents did not want their education interrupted or as in many cases felt they were too young to assume the responsibility of motherhood.

The researchers speculate that those respondents whose concept of self was positive were influenced by external factors such as education and income. Findings indicated that respondents with a better education and higher income had a better understanding of the abortion procedure. The more educated the respondents the more effectively they could use rationalization to support their reasons for abortion and lessen their feelings of guilt because the fetus was not considered a living human being when they requested the suction procedure. Proper education concerning abortion dispelled their fears of sterilization occurring after termination of pregnancy.

Further damage to the self-concept was avoided by those respondents whose self-concept was negative by terminating the unwanted pregnancy. This was indicated by expressed feelings of disgust, frustration, etc., when they became aware that they were pregnant.

Findings indicated that religious affiliation had no direct influence on the woman's psychological and emotional responses to abortion.

## CONCLUSION

The aim of this study was to investigate the psychological and emotional effects of abortion on women who terminated their pregnancies for social, economic, or personal reasons as revealed by the women's concept of self, external support given, and the various coping mechanisms utilized in the pre- and post- abortal phases.

Age, race, marital status, education, occupation, income, and the number of children the respondents had were found to influence her general attitude towards abortion, her beliefs on abortion, and her pre- post- abortal behavior (see TABLE IV).

As far as the psychological effect, feelings of relief were expressed by the majority of the respondents. However, religion was not significant since no difference between Catholics and Protestants was found in most of the questions discussed in this study.

On the basis of the findings of this study, the authors recommend that health disciplines initiate improvement of the orientation of the patient regarding the different abortion procedures, hospital routines, and post-abortal teaching of contraceptive use and its importance.

The authors would like to have a follow-up of the cases investigated but lack of funds made this impossible, but they hope that in the near future,a longitudinal study on a bigger scale would be conducted.

TABLE I: TABLE OF SIGNIFICANCE - RESPONDENTS GENERAL ATTITUDES

| Research Questions | Age | | Race | | Marital Status | | Occupation | | Income | | Number of Children | | Religion | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P |
| 1. Were your previous pregnancies planned? | 1.30 | N.S. | 1.07 | N.S. | 10.69 | ∠.005 | .15 | N.S. | 2.48 | N.S. | 2.86 | N.S. | .18 | N.S. |
| 2. How frequently do you use birth control? | 59.36 | ∠.0001 | .66 | N.S. | 11.88 | N.S. | 17.68 | ∠.01 | 9.36 | N.S. | 23.55 | ∠.0001 | .20 | N.S. |
| 3. Birth Control Methods used? | 41.99 | ∠.005 | 4.21 | N.S. | 19.75 | ∠.05 | 20.04 | ∠.05 | 24.50 | N.S. | 41.49 | ∠.0001 | 4.14 | N.S. |
| 4. Did you have problems with your previous pregnancies? | 18.84 | ∠.005 | .71 | N.S. | 6.91 | ∠.05 | .74 | N.S. | 2.45 | N.S. | 6.57 | ∠.05 | .53 | N.S. |
| 5. Have you had previous abortions? | 21.50 | ∠.01 | .87 | N.S. | 6.81 | N.S. | 6.54 | N.S. | 23.74 | ∠.01 | 5.18 | N.S. | 1.88 | N.S. |
| 6. Reasons for previous abortions. | 9.89 | N.S. | 5.06 | ∠.10 | 4.43 | N.S. | 1.37 | N.S. | 13.19 | N.S. | 4.49 | N.S. | .28 | N.S. |
| 7. Do you have friends who had abortions? | 6.17 | N.S. | .51 | N.S. | 4.48 | N.S. | 4.25 | N.S. | 4.42 | N.S. | 2.58 | N.S. | .41 | N.S. |
| 8. How do you describe your relationship with that friend? | 1.53 | N.S. | 6.33 | ∠.01 | 1.38 | N.S. | 1.75 | N.S. | 4.73 | N.S. | 11.01 | ∠.005 | .61 | N.S. |
| 9. Do you plan to use birth control later? | 12.79 | N.S. | .52 | N.S. | 2.36 | N.S. | 2.85 | N.S. | 5.65 | N.S. | 3.64 | N.S. | .87 | N.S. |

TABLE II: PRE-ABORTION INTERVIEW - TABLE OF SIGNIFICANCE

| Research Questions | Age | | Race | | Marital Status | | Occupation | | Income | | Number of Children | | Religion | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P |
| 1. Feelings when you become aware of being pregnant. | 33.73 | N.S. | 7.17 | N.S. | 31.03 | N.S. | 10.86 | N.S. | 14.73 | N.S. | 40.39 | ∠.0001 | 12.80 | N.S. |
| 2. How did you decide to have the abortion? | 22.98 | ∠.05 | 6.89 | ∠.10 | 12.70 | ∠.05 | 6.22 | N.S. | 12.53 | N.S. | 16.12 | ∠.02 | .16 | N.S. |
| 3. Did the male involved know of the decision? | 3.45 | N.S. | 3.70 | ∠.10 | 16.26 | ∠.0001 | 2.36 | N.S. | 5.76 | N.S. | .50 | N.S. | 2.17 | N.S. |
| 4. How did he respond to the decision? | 15.96 | ∠.05 | 3.92 | N.S. | 10.63 | ∠.05 | .555 | N.S. | 5.85 | N.S. | 9.50 | ∠.05 | .76 | N.S. |
| 5. What is your attitude towards abortion in general? | 17.06 | N.S. | 3.51 | N.S. | 10.99 | ∠.10 | 9.19 | N.S. | 14.73 | N.S. | 5.17 | N.S. | 4.98 | N.S. |
| 6. How is your relationship with the male affected by the pregnancy? | 1.59 | N.S. | 2.95 | ∠.10 | .42 | N.S. | 2.68 | N.S. | 8.69 | N.S. | 7.74 | ∠.02 | .46 | N.S. |
| 7. How did the decision for the abortion affect your relationship to the male? | 2.17 | N.S. | 16.60 | ∠.0001 | 6.11 | ∠.05 | 8.34 | ∠.02 | 10.13 | ∠.10 | 6.34 | ∠.05 | .001 | N.S. |
| 8. How do you perceive the attitude of the Professional Staff? | 5.94 | N.S. | 6.17 | ∠.05 | 6.92 | N.S. | 4.55 | N.S. | 3.85 | N.S. | 3.08 | N.S. | 3.59 | N.S. |

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TABLE II: PRE-ABORTION INTERVIEW - TABLE OF SIGNIFICANCE (cont'd)

| Research Questions | Age | | Race | | Marital Status | | Occupation | | Income | | Number of Children | | Religion | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P |
| 9. How do you perceive the attitude of the Non-Professional Staff? | .73 | N.S. | 1.40 | N.S. | 3.30 | N.S. | 4.55 | N.S. | 3.85 | N.S. | 3.08 | N.S. | 1.18 | N.S. |
| 10. Feelings experienced by respondent since the decision to have the abortion. | 29.29 | N.S. | 12.37 | $<.10$ | 12.80 | N.S. | 16.49 | N.S. | 35.23 | N.S. | 8.23 | N.S. | 8.66 | N.S. |
| 11. How do you feel about engaging in sexual act with your partner? | 9.79 | N.S. | 9.57 | $<.01$ | 10.82 | $<.05$ | 4.68 | N.S. | 11.58 | N.S. | 14.24 | $<.01$ | 6.65 | $<.05$ |
| 12. What type of abortion respondent loving? | 3.14 | N.S. | 8.60 | $<.005$ | .31 | N.S. | 4.28 | N.S. | 3.71 | N.S. | 2.65 | N.S. | .63 | N.S. |
| 13. Does respondent understand the Abortion Procedure? | 4.71 | N.S. | 14.81 | $<.0001$ | 3.68 | N.S. | 7.97 | $<.10$ | 19.30 | $<.05$ | 11.05 | $<.05$ | 7.72 | $<.02$ |

TABLE III: POST-ABORTION INTERVIEW - TABLE OF SIGNIFICANCE

| Research Questions | Age | | Race | | Education | | Marital Status | | Occupation | | Income | | Number of Children | | Religion | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P | $X^2$ | P |
| 1. How do you describe your feelings at present | 22.45 | <.05 | 10.50 | <.02 | 3.26 | N.S. | 5.48 | N.S. | 7.24 | N.S. | 14.28 | N.S. | 3.35 | N.S. | 2.85 | N.S |
| 2. Reasons for feelings | 14.83 | N.S. | .79 | N.S. | .23 | N,S. | 4.42 | N.S. | 1.40 | N.S. | 11.50 | N.S. | 2.75 | N.S. | .79 | N.S |
| 3. How do you perceive the attitudes of the Professional Staff | 2.11 | N.S. | 1.13 | N.S. | 13.84 | <.0001 | 1.58 | N.S. | 7.54 | <.02 | 6.01 | N.S. | 5.65 | <.10 | .001 | N.S |
| 4. How do you perceive the attitudes of the Non-Professional Staff | 1.75 | N.S. | 1.27 | N.S. | 10.84 | <.0001 | 1.47 | N.S. | 7.29 | <.05 | 5.58 | N.S. | 6.56 | <.05 | 1.02 | N.S |
| 5. Would you recommend an abortion to a relative or friend | 5.28 | N.S. | 2.79 | N.S. | 4.99 | N.S. | 7.02 | N.S. | 9.51 | N.S. | 32.51 | <.01 | 11.72 | <.10 | 6.29 | <.10 |
| 6. Would you have another abortion | 15.41 | <.10 | 10.25 | <.01 | 1.87 | N.S. | 1.81 | N.S. | 7.66 | N.S. | 5.92 | N.S. | 1.38 | N.S. | 2.94 | N.S |

TABLE IV: CORRELATION OF VARIABLES

| Research Questions | Age | Race | Religion | Marital Status | Education | Occupation | Income | No. of Children |
|---|---|---|---|---|---|---|---|---|
| . Were your previous pregnancies planned. | -.04 | .05 | .04 | -.33 | .13 | .04 | .02 | -.13 |
| 2. How frequently do you use birth control | -.31 | -.01 | -.02 | -.18 | -.05 | -.19 | .05 | -.31 |
| 3. Birth Control Methods used. | -.27 | .04 | -.09 | -.20 | 0 | -.30 | .10 | -.26 |
| 4. Did you have problems with previous pregnancy | -.25 | -.10 | -.07 | -.25 | -.03 | -.04 | .03 | -.25 |
| 5. Have you had previous abortions | .29 | .03 | .02 | .16 | .16 | .17 | .24 | .11 |
| 6. Reasons for previous abortions | .11 | .30 | -.04 | .05 | .11 | 0 | -.24 | .05 |
| 7. Do you have friends who have had abortions | .15 | -.06 | -.05 | 0 | -.09 | -.08 | .02 | .13 |
| 8. How would you describe your relationship with that friend. | .06 | .25 | -.08 | .11 | -.08 | -.05 | -.11 | .33 |
| 9. Do you plan to use birth control later on | -.08 | -.03 | .01 | -.12 | .05 | -.13 | -.03 | -.16 |
| 10. Feelings when you became aware of being pregnant. | -.15 | .03 | .07 | -.06 | -.05 | -.05 | -.04 | -.13 |
| 11. How did you decide to have the abortion | .06 | .21 | -.03 | .05 | -.06 | .10 | -.07 | .15 |
| 12. Did the male involved know of the decision | -.14 | .16 | -.13 | .19 | 0 | -.08 | -.18 | .06 |
| 13. How did he respond to the decision. | | .19 | -.08 | -.01 | -.03 | -.03 | .05 | .07 |
| 14. What is your attitude towards abortion in general. | .05 | .04 | .08 | -.04 | -.10 | -.18 | -.05 | .02 |
| 15. How is your relationship with the male affected by the pregnancy. | .02 | .17 | .06 | -.06 | -.18 | -.12 | -.19 | .22 |
| 16. How did the decision for the abortion affect your relationship with the male | -.05 | .41 | 0 | .06 | .03 | -.26 | -.19 | .24 |
| 17. How do your perceive the attitude of the professional staff. | -.03 | -.14 | .12 | -.01 | .24 | .05 | -.09 | -.18 |
| 18. How do you perceive the attitude of the non-professional staff. | -.02 | -.12 | .11 | .03 | .25 | .22 | -.08 | -.16 |
| 19. Feelings experienced by the respondent since the abortion. | -.08 | -.12 | .01 | -.05 | -.01 | -.10 | -.05 | .02 |
| 20. How do you feel about engaging in sexual act with partner. | -.11 | -.04 | -.09 | -.02 | .07 | -.02 | .08 | -.11 |

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TABLE IV: CORRELATION OF VARIABLES (cont'd)

| Research Questions | Age | Race | Religion | Marital Status | Edu-cation | Occu-pation | Income | No. of Childrer |
|---|---|---|---|---|---|---|---|---|
| 21. What type of abortion respondent having | .09 | -.25 | .07 | -.05 | .19 | .12 | .17 | -.01 |
| 22. Does respondent understand the abortion procedure. | .02 | .26 | -.22 | .02 | -.05 | -.11 | -.21 | .16 |
| 23. How do you describe your feelings at present. | .06 | -.25 | .13 | -.04 | -.12 | -.04 | .14 | -.07 |
| 24. Reasons for feelings | .35 | -.06 | -.06 | .40 | -.02 | .17 | .36 | .17 |
| 25. How do you perceive the attitudes of the professional staff. | .01 | -.09 | 0 | -.06 | .32 | .21 | .14 | -.19 |
| 26. How do you perceive the attitude of the non-professional staff | .01 | -.11 | .09 | -.08 | .28 | .19 | .14 | -.22 |
| 27. Would you recommend an abortion to a relative or friend | .05 | -.02 | -.10 | .14 | .01 | -.17 | 0 | -.02 |
| 28. Would you have another abortion. | .01 | .15 | -.13 | -.04 | -.08 | -.07 | -.09 | .09 |

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